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**1 Validation of nonrigid image registration using finite-element method application to breast MR images**
*Schnabel, J.A.; Tanner, C.; Castellano-Smith, A.D.; Degenhard, A.; Leach, M. Hose, D.R.; Hill, D.L.G.; Hawkes, D.J.;*

 Medical Imaging, IEEE Transactions on , Volume: 22 , Issue: 2 , Feb. 2003  
 Pages:238 - 247

[\[Abstract\]](#)    [\[PDF Full-Text \(827 KB\)\]](#)    **IEEE JNL**
**2 D-NURBS: a physics-based framework for geometric design**
*Hong Qin; Terzopoulos, D.;*

 Visualization and Computer Graphics, IEEE Transactions on , Volume: 2 , Issue: 1 , March 1996  
 Pages:85 - 96

[\[Abstract\]](#)    [\[PDF Full-Text \(1404 KB\)\]](#)    **IEEE JNL**

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**1 Path planning for an omnidirectional mobile manipulator by evolutionary computation**

Watanabe, K.; Kiguchi, K.; Izumi, K.; Kunitake, Y.;

 Knowledge-Based Intelligent Information Engineering Systems, 1999. Third International Conference, 31 Aug.-1 Sept. 1999  
 Pages:135 - 140

[\[Abstract\]](#) [\[PDF Full-Text \(412 KB\)\]](#) [IEEE CNF](#)

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### 1 A new algorithm for solving Maxwell's equations in high-power microwave device simulations

*Chih-Chien Lin; Lin, A.T.;*

Plasma Science, IEEE Transactions on , Volume: 26 , Issue: 3 , June 1998  
 Pages:893 - 900

[\[Abstract\]](#)   [\[PDF Full-Text \(276 KB\)\]](#)   **IEEE JNL**

### 2 Spatially variant B-spline function for image interpolation

*Hee Soo Kim; Hyung Suk Kim; Sun Kyu Kwon; Yeong Ho Ha;*

TENCON 99. Proceedings of the IEEE Region 10 Conference , Volume: 1 , 15-Sept. 1999  
 Pages:714 - 717 vol.1

[\[Abstract\]](#)   [\[PDF Full-Text \(364 KB\)\]](#)   **IEEE CNF**

### 3 A heuristic to isolate interfering bodies in the BNCT treatment planning system

*Chawla, R.; Starkey, J.D.; Babcock, R.S.; Wessol, D.E.;*

Computer-Based Medical Systems, 1994., Proceedings 1994 IEEE Seventh Symposium on , 10-12 June 1994  
 Pages:152 - 157

[\[Abstract\]](#)   [\[PDF Full-Text \(180 KB\)\]](#)   **IEEE CNF**

### 4 Temporal subtraction of thorax CR images using a statistical deformation model

*Loeckx, D.; Maes, F.; Vandermeulen, D.; Suetens, P.;*

Medical Imaging, IEEE Transactions on , Volume: 22 , Issue: 11 , Nov. 2003  
 Pages:1490 - 1504

[\[Abstract\]](#)   [\[PDF Full-Text \(4872 KB\)\]](#)   **IEEE JNL**

**5 Modeling respiratory mechanics in the MCAT and spline-based MCAT phantoms**

*Segars, W.P.; Lalush, D.S.; Tsui, B.M.W.;*

Nuclear Science, IEEE Transactions on , Volume: 48 , Issue: 1 , Feb 2001

Pages:89 - 97

[\[Abstract\]](#) [\[PDF Full-Text \(1324 KB\)\]](#) **IEEE JNL**

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**6 Effects of upward creep and respiratory motion in myocardial SPECT**

*Tsui, B.M.W.; Segars, W.P.; Lalush, D.S.;*

Nuclear Science, IEEE Transactions on , Volume: 47 , Issue: 3 , June 2000

Pages:1192 - 1195

[\[Abstract\]](#) [\[PDF Full-Text \(472 KB\)\]](#) **IEEE JNL**

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**7 Region coding using improved B-spline surface approximation**

*Jinhui Pan; Qingmin Liao;*

Electronics Letters , Volume: 36 , Issue: 2 , 20 Jan. 2000

Pages:129 - 130

[\[Abstract\]](#) [\[PDF Full-Text \(112 KB\)\]](#) **IEEE JNL**

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**8 Dynamic multiresolution route optimization for autonomous aircraft**

*Samad, T.; Gorinevsky, D.; Stoffelen, F.;*

Intelligent Control, 2001. (ISIC '01). Proceedings of the 2001 IEEE International Symposium on , 5-7 Sept. 2001

Pages:13 - 18

[\[Abstract\]](#) [\[PDF Full-Text \(546 KB\)\]](#) **IEEE CNF**

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**1 Recovery of corrupted image data based on the NURBS interpolation**  
Jong Wook Park; Sang Uk Lee;

Circuits and Systems for Video Technology, IEEE Transactions on , Volume: 9 , Issue: 7 , Oct. 1999

Pages:1003 - 1008

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**INSPEC - 1969 to date (INZZ)**

### Accession number & update

6658183, A2000-17-4710-014; 20000701.

### Title

Accuracy and stability of a set of free-surface time-domain boundary element models based on **B-splines**.

### Author(s)

[Buchmann-B.](#)

### Author affiliation

Dept of Hydrodynamics and Water Resources, Tech Univ Denmark, Lyngby, Denmark.

### Source

International-Journal-for-Numerical-Methods-in-Fluids (UK), vol.33, no.1, p.125-55, 15 May 2000. ,  
Published: Wiley.

### CODEN

IJNFDW.

### ISSN

ISSN: 0271-2091.

### Availability

SICI: 0271-2091(20000515)33:1L.125:ASFS; 1-1.

### Publication year

2000.

### Language

EN.

### Publication type

J Journal Paper.

### Treatment codes

T Theoretical or Mathematical.

### Abstract

An analysis is given for the accuracy and stability of some perturbation-based time-domain boundary element models (BEMs) with **B-spline** basis functions, solving hydrodynamic free-surface problems, including forward speed effects. The spatial convergence rate is found as a function of the order of the **B-spline** basis. It is shown that for all the models examined the mixed implicit-explicit Euler time integration scheme is correct to second order. Stability diagrams are found for models based on **B-splines** of orders third through to sixth for two different time integration schemes. The stability analysis can be regarded as an extension of the analysis by Vada and Nakos Vada T, Nakos DE. Time marching schemes for ship motion simulations. In Proceedings of the 8th International Workshop on Water Waves and Floating Bodies, St. John's, Newfoundland, Canada, 1993; 155-158 to include **B-splines** of orders higher than three (piecewise quadratic polynomials) and to include finite water depth



and a current at an oblique angle to the model **grid**. (25 refs).

**Descriptors**

boundary-elements-methods; flow-simulation; hydrodynamics;  
integration; numerical-stability; perturbation-theory; polynomials;  
splines-mathematics; time-domain-analysis.

**Keywords**

free surface time domain boundary element models; **B splines**; stability; accuracy; perturbation based time domain boundary element models; **B** spline basis functions; hydrodynamic free surface problems; forward speed effects; spatial convergence rate; **B** spline basis; mixed implicit explicit Euler time integration scheme; stability diagrams; time integration scheme; stability analysis; finite water depth; oblique angle; model **grid**.

**Classification codes**

A4710 (General fluid dynamics theory, **simulation** and other

computational methods).

A0260 (Numerical approximation and analysis).

A0210 (Algebra, set theory, and graph theory).

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☒ **document 2 of 2** [Order Document](#)**INSPEC - 1969 to date (INZZ)****Accession number & update**

4328708, B9303-0290T-001, C9303-4185-002; 930119.

**Title**The National **Grid** Project.**Author(s)**[Thompson-J-F.](#)**Author affiliation**NSF Eng Res Center for Comput Field **Simulation**, Mississippi State Univ, Mississippi State, MS, USA.**S ource**

Symposium on High-Performance Computing for Flight Vehicles, Washington, DC, USA, 7-9 Dec. 1992.

Sponsors: Univ. Virginia, George Washington Univ., NASA.

In: Computing-Systems-in-Engineering (UK), vol.3, no.1-4, p.393-9, 1992.

**CODEN**

COSEEO.

**ISSN**

ISSN: 0956-0521, CCCC: 0956-0521/92/ (\$5.00+.00).

**Publication year**

1992.

**Language**

EN.

**Publication type**

CPP Conference Paper, J Journal Paper.

**Treatment codes**

G General or Review.

**Abstract**

The objective of this National **Grid** Project is to increase the efficiency and productivity of the **grid** generation process to the high level required for high performance computational **simulation** of real-world systems for design and analysis in engineering applications. The Project is achieving this objective by developing a comprehensive interactive/automated **grid** generation system which will provide a uniform environment for the construction of computational grids using state-of-the-art technology. This comprehensive **grid** generation system is a necessary element to meet the grand challenges of the nation's High Performance Computing and Communications Program. The system incorporates a surface definition system including: an interface with IGES files and CAD systems; **B-splines** and NURBS; surface-surface intersection; surface quality enhancement; a surface **grid** generation system based on surface parametric coordinates; a volume **grid** generation system including transfinite interpolation, elliptic and hyperbolic generation systems; both block-structured and unstructured grids with hybrid and chimera (overset) combinations; and orthogonal, reflective and

periodic boundaries. Block interfaces and connectivity are automated and the system includes automated fault diagnostics and corrective measures. (0 refs).

**Descript rs**

electronic-data-interchange; mesh-generation; partial-differential-equations.

**Keyw rds**

orthogonal boundaries; block structured grids; mesh generation; reflective boundaries; partial differential equations; IGES interface; CAD interface; domain decomposition; National **Grid** Project; **grid** generation process; engineering applications; computational grids; surface definition system; IGES files; CAD systems; **B splines**; NURBS; surface surface intersection; surface quality enhancement; surface **grid** generation system; surface parametric coordinates; volume **grid** generation; transfinite interpolation; elliptic; hyperbolic; block structured; unstructured grids; periodic boundaries; automated fault diagnostics; corrective measures.

**Classification codes**

B0290T (Finite element analysis).  
B0290P (Differential equations).  
C4185 (Finite element analysis).  
C7400 (Engineering).  
C4170 (Differential equations).

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1982. (INZZ) Modelling chemically reacting flow systems. II. An adaptive spatial mesh technique for problems with discontinuities and steep fronts.

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1965821, A83004288, C83002862; 830000.

**Title**

Modelling chemically reacting flow systems. II. An adaptive spatial mesh technique for problems with discontinuities and steep fronts.

**Author(s)**[Nikolakopoulou-G-A](#); [Edelson-D](#); [Schryer-N-L](#).**Author affiliation**

Bell Labs, Murray Hill, NJ, USA.

**Source**

Computers-Chemistry (UK), vol.6, no.3, p.93-9, 1982.

**CODEN**

COCHDK.

**ISSN**

ISSN: 0097-8485.

**Publication year**

1982.

**Language**

EN.

**Publication type**

J Journal Paper.

**Treatment codes**

T Theoretical or Mathematical.

**Abstract**

For pt.I see *ibid.*, vol.2, p.71 (1978). An algorithm is developed for the numerical solution of nonlinear time-varying partial differential equations in one space dimension, whose solution exhibits moving spatial derivative discontinuities and steep fronts. A **finite-element** technique dynamically maps a static uniform mesh onto a moving mesh. This gives the capability of tracking discontinuities and steep fronts and assigning variable subintervals. The technique used is a combination of spatial discretization by Galerkins methods, using **B-splines**, and solution in time by a variable order, variable time-step extrapolation procedure. The two spatial meshes are coupled through a set of ordinary differential equations defining either conditions in the solution function (discontinuities, steep fronts), or direct values of the adaptive mesh. This set of ordinary differential equations is coupled to the partial differential equations defining the problem and is solved simultaneously with it. The technique was applied to the problem of migration of copper salts through polyethylene, and enabled the authors to handle successfully the phenomena of diffusion, reaction, and precipitation, which mathematically translate into a steep front, boundary layer, and a derivative discontinuity respectively. The

**simulati n** reproduced the main features found experimentally, lending credence to the correctness of the model and the validity of the calculated results. (11 refs).

**Descript rs**

boundary-layers; chemically-reactive-flow; chemistry-computing;  
diffusion; finite-element-analysis; partial-differential-equations;  
splines-mathematics; subroutines.

**Keyw rds**

subroutines; chemically reacting flow systems; adaptive spatial mesh technique; discontinuities; steep fronts; numerical solution; nonlinear time varying partial differential equations; **finite element** technique; spatial discretization; Galerkins methods; **B splines**; ordinary differential equations; copper salts; polyethylene; correctness.

**Classification codes**

A4770F (Chemically reactive flows).  
A8240 (Chemical kinetics and reactions: special regimes).  
C4170 (Differential equations).  
C7320 (Physics and Chemistry).

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TITLE: System and methods of nonuniform data sampling and data reconstruction in shift invariant and wavelet spaces

PUBLICATION-DATE: March 4, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Aldroubi, Akram	Nashville	TN	US	
Grochenig, Karlheinz	Nashville	TN	US	
Feichtinger, Hans G.	Mistelbach		AT	

US-CL-CURRENT: 708/490

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 20020029135 A1

L11: Entry 2 of 3

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020029135

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020029135 A1

TITLE: Process for increasing the efficiency of a computer in finite element simulations and a computer for performing that process

PUBLICATION-DATE: March 7, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hollig, Klaus	Zavelstein		DE	
Reif, Ulrich	Reichelsheim		DE	
Wipper, Joachim	Leinfelden-Echterdingon		DE	

US-CL-CURRENT: 703/2



Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 6718291 B1

L11: Entry 3 of 3

File: USPT

Apr 6, 2004

US-PAT-NO: 6718291

DOCUMENT-IDENTIFIER: US 6718291 B1

TITLE: Mesh-free method and system for modeling and analysis

DATE-ISSUED: April 6, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shapiro; Vadim	Madison	WI	53705	
Tsukanov; Igor G.	Madison	WI	53705	

US-CL-CURRENT: 703/2; 703/14, 703/5, 716/20

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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Term	Documents
CELL?	0
CELLA	36469
CELLB	38
CELLC	9
CELLED	4
CELLE	979
CELLF	1
CELLG	1
CELLI	339
CELLJ	6
CELLK	5
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Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 20040071363 A1

Using default format because multiple data bases are involved.

L14: Entry 1 of 5

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040071363

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040071363 A1

TITLE: Methods for performing DAF data filtering and padding

PUBLICATION-DATE: April 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kouri, Donald J.	Bellaire	TX	US	
Hoffman, David K.	Missouri City	TX	US	
Kakadiaris, Ioannis A.	Houston	TX	US	
Shi, Zhuoer	Fayetteville	AR	US	
Zhang, DeSheng	Houston	TX	US	
Gunaratne, Gemunu H.	East Lansing	MI	US	
Arnold, Mark	Shaanxi		US	
Wang, Haixiang			US	
Wei, Guowei W.			US	
Bao, Zheng			CN	

US-CL-CURRENT: [382/276](#); [382/128](#), [382/254](#)

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☐ 2. Document ID: US 20020029135 A1

L14: Entry 2 of 5

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020029135

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020029135 A1

TITLE: Process for increasing the efficiency of a computer in finite element simulations and a computer for performing that process

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hollig, Klaus	Zavelstein		DE	
Reif, Ulrich	Reichelsheim		DE	
Wipper, Joachim	Leinfelden-Echterdingon		DE	

US-CL-CURRENT: 703/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 3. Document ID: US 6718291 B1

L14: Entry 3 of 5

File: USPT

Apr 6, 2004

US-PAT-NO: 6718291

DOCUMENT-IDENTIFIER: US 6718291 B1

TITLE: Mesh-free method and system for modeling and analysis

DATE-ISSUED: April 6, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shapiro; Vadim	Madison	WI	53705	
Tsukanov; Igor G.	Madison	WI	53705	

US-CL-CURRENT: 703/2; 703/14, 703/5, 716/20

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 4. Document ID: US 5561754 A

L14: Entry 4 of 5

File: USPT

Oct 1, 1996

US-PAT-NO: 5561754

DOCUMENT-IDENTIFIER: US 5561754 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Area preserving transformation system for press forming blank development

DATE-ISSUED: October 1, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oliver; James H.	Ames	IA		
Nair; Nirmal K.	Ames	IA		

US-CL-CURRENT: 345/441

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 5. Document ID: US 5510995 A

L14: Entry 5 of 5

File: USPT

Apr 23, 1996

US-PAT-NO: 5510995

DOCUMENT-IDENTIFIER: US 5510995 A

TITLE: Sculptured surface synthesis based on functional design constraints

DATE-ISSUED: April 23, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oliver; James H.	Ames	IA		

US-CL-CURRENT: 700/182; 345/419, 345/440

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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Bkwd Refs

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Term	Documents
FINITE	94103
FINITES	14
ELEMENT	1153007
ELEMENTS	1511676
(13 AND (FINITE ADJ ELEMENT)).PGPB,USPT.	5
(L13 AND FINITE ELEMENT ).PGPB,USPT.	5

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**Search Results - Record(s) 1 through 16 of 16 returned.**

☐ 1. Document ID: US 20040071363 A1

**Using default format because multiple data bases are involved.**

L13: Entry 1 of 16

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040071363

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040071363 A1

TITLE: Methods for performing DAF data filtering and padding

PUBLICATION-DATE: April 15, 2004

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	COUNTRY	RULE-47
Kouri, Donald J.	Bellaire	TX	US	
Hoffman, David K.	Missouri City	TX	US	
Kakadiaris, Ioannis A.	Houston	TX	US	
Shi, Zhuoer	Fayetteville	AR	US	
Zhang, DeSheng	Houston	TX	US	
Gunaratne, Gemunu H.	East Lansing	MI	US	
Arnold, Mark	Shaanxi		US	
Wang, Haixiang			US	
Wei, Guowei W.			US	
Bao, Zheng			CN	

US-CL-CURRENT: [382/276](#); [382/128](#), [382/254](#)

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">RIMC</a>	<a href="#">Draw D</a>
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☐ 2. Document ID: US 20040070394 A1

L13: Entry 2 of 16

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040070394

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040070394 A1

TITLE: Parallel mr imaging using high-precision coil sensitivity map

PUBLICATION-DATE: April 15, 2004

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	COUNTRY	RULE-47
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Gonzalez Ballester, Miguel Angel                      Nice                      FR  
Machida, Yoshio                      Nasu-Gun                      JP

US-CL-CURRENT: 324/307; 324/309

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 20020029135 A1

L13: Entry 3 of 16

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020029135  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020029135 A1

TITLE: Process for increasing the efficiency of a computer in finite element  
simulations and a computer for performing that process

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hollig, Klaus	Zavelstein		DE	
Reif, Ulrich	Reichelsheim		DE	
Wipper, Joachim	Leinfelden-Echterdingen		DE	

US-CL-CURRENT: 703/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 6738062 B1

L13: Entry 4 of 16

File: USPT

May 18, 2004

US-PAT-NO: 6738062  
DOCUMENT-IDENTIFIER: US 6738062 B1

TITLE: Displaced subdivision surface representation

DATE-ISSUED: May 18, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moreton; Henry P.	Woodside	CA		

US-CL-CURRENT: 345/423; 345/420

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 6718291 B1

L13: Entry 5 of 16

File: USPT

Apr 6, 2004

US-PAT-NO: 6718291  
DOCUMENT-IDENTIFIER: US 6718291 B1

TITLE: Mesh-free method and system for modeling and analysis

DATE-ISSUED: April 6, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shapiro; Vadim	Madison	WI	53705	
Tsukanov; Igor G.	Madison	WI	53705	

US-CL-CURRENT: 703/2; 703/14, 703/5, 716/20

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 6. Document ID: US 6614847 B1

L13: Entry 6 of 16

File: USPT

Sep 2, 2003

US-PAT-NO: 6614847  
DOCUMENT-IDENTIFIER: US 6614847 B1

TITLE: Content-based video compression

DATE-ISSUED: September 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Das; Arnab	Greenbelt	MD		
Talluri; Rajendra K.	Plano	TX		

US-CL-CURRENT: 375/240.16; 375/240.15, 375/240.23, 375/240.27, 714/756, 714/822,  
714/824

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 7. Document ID: US 6462742 B1

L13: Entry 7 of 16

File: USPT

Oct 8, 2002

US-PAT-NO: 6462742  
DOCUMENT-IDENTIFIER: US 6462742 B1

TITLE: System and method for multi-dimensional motion interpolation using verbs and adverbs

DATE-ISSUED: October 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rose; Charles F.	Redmond	WA		
Cohen; Michael F.	Seattle	WA		

Bodenheimer, Jr.; Robert E.

Atlanta GA

US-CL-CURRENT: 345/473

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. De
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☐ 8. Document ID: US 6453073 B2

L13: Entry 8 of 16

File: USPT

Sep 17, 2002

US-PAT-NO: 6453073

DOCUMENT-IDENTIFIER: US 6453073 B2

TITLE: Method for transferring and displaying compressed images

DATE-ISSUED: September 17, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johnson; Stephen G.	Newport Beach	CA		

US-CL-CURRENT: 382/239; 369/124.06, 382/240

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. De
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☐ 9. Document ID: US 6389154 B1

L13: Entry 9 of 16

File: USPT

May 14, 2002

US-PAT-NO: 6389154

DOCUMENT-IDENTIFIER: US 6389154 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Exact evaluation of subdivision surfaces generalizing box splines at arbitrary parameter values

DATE-ISSUED: May 14, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stam; Jos	Seattle	WA		

US-CL-CURRENT: 382/108; 345/582, 382/100

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. De
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☐ 10. Document ID: US 6272253 B1

L13: Entry 10 of 16

File: USPT

Aug 7, 2001

US-PAT-NO: 6272253

DOCUMENT-IDENTIFIER: US 6272253 B1



TITLE: Content-based video compression

DATE-ISSUED: August 7, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bannon; Thomas J.	Dallas	TX		
Talluri; Rajendra K.	Plano	TX		

US-CL-CURRENT: 382/236; 382/243

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 11. Document ID: US 6026183 A

L13: Entry 11 of 16

File: USPT

Feb 15, 2000

US-PAT-NO: 6026183

DOCUMENT-IDENTIFIER: US 6026183 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Content-based video compression

DATE-ISSUED: February 15, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Talluri; Rajendra K.	Plano	TX		
Das; Arnab	Greenbelt	MD		
Bannon; Thomas J.	Dallas	TX		
Courtney; Jonathan D.	Richardson	TX		

US-CL-CURRENT: 382/194; 382/180, 382/237

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 12. Document ID: US 5896176 A

L13: Entry 12 of 16

File: USPT

Apr 20, 1999

US-PAT-NO: 5896176

DOCUMENT-IDENTIFIER: US 5896176 A

TITLE: Content-based video compression

DATE-ISSUED: April 20, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Das; Arnab	Greenbelt	MD		
Talluri; Rajendra K.	Plano	TX		

US-CL-CURRENT: [375/240.15](#); [375/240.23](#), [375/240.27](#), [714/756](#), [714/822](#), [714/824](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 13. Document ID: US 5892847 A

L13: Entry 13 of 16

File: USPT

Apr 6, 1999

US-PAT-NO: 5892847

DOCUMENT-IDENTIFIER: US 5892847 A

TITLE: Method and apparatus for compressing images

DATE-ISSUED: April 6, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johnson; Stephen G.	Newport Beach	CA		

US-CL-CURRENT: [382/232](#); [382/233](#), [382/239](#), [382/244](#), [382/248](#), [382/304](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 14. Document ID: US 5561754 A

L13: Entry 14 of 16

File: USPT

Oct 1, 1996

US-PAT-NO: 5561754

DOCUMENT-IDENTIFIER: US 5561754 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Area preserving transformation system for press forming blank development

DATE-ISSUED: October 1, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oliver; James H.	Ames	IA		
Nair; Nirmal K.	Ames	IA		

US-CL-CURRENT: [345/441](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 15. Document ID: US 5510995 A

L13: Entry 15 of 16

File: USPT

Apr 23, 1996

US-PAT-NO: 5510995

DOCUMENT-IDENTIFIER: US 5510995 A

TITLE: Sculptured surface synthesis based on functional design constraints

DATE-ISSUED: April 23, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oliver; James H.	Ames	IA		

US-CL-CURRENT: 700/182; 345/419, 345/440

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Drawings
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☐ 16. Document ID: US 5005147 A

L13: Entry 16 of 16

File: USPT

Apr 2, 1991

US-PAT-NO: 5005147

DOCUMENT-IDENTIFIER: US 5005147 A

TITLE: Method and apparatus for sensor fusion

DATE-ISSUED: April 2, 1991

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Krishen; Kumar	Seabrook	TX		
Shaw; Scott W.	Saratoga	CA		
deFigueiredo; Rui J. P.	Houston	TX		

US-CL-CURRENT: 703/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Drawings
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REGIONC	1
REGIOND	3
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REGIONG	3
REGIONH	2
REGIONI	1
REGIONK	2
REGIONL	4
(L10 AND REGION? ).PGPB,USPT.	16

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☐ 1. Document ID: US 20020029135 A1

Using default format because multiple data bases are involved.

L6: Entry 1 of 1

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020029135

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020029135 A1

TITLE: Process for increasing the efficiency of a computer in finite element simulations and a computer for performing that process

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hollig, Klaus	Zavelstein		DE	
Reif, Ulrich	Reichelsheim		DE	
Wipper, Joachim	Leinfelden-Echterdingon		DE	

US-CL-CURRENT: 703/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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SIMULATIONS	23815
REGION	908368
REGIONS	509267
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(L5 AND SIMULATION REGION ).PGPB,USPT.	1

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Search Results - Record(s) 1 through 8 of 8 returned.

☐ 1. Document ID: US 20040071363 A1

Using default format because multiple data bases are involved.

L7: Entry 1 of 8

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040071363

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040071363 A1

TITLE: Methods for performing DAF data filtering and padding

PUBLICATION-DATE: April 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kouri, Donald J.	Bellaire	TX	US	
Hoffman, David K.	Missouri City	TX	US	
Kakadiaris, Ioannis A.	Houston	TX	US	
Shi, Zhuoer	Fayetteville	AR	US	
Zhang, DeSheng	Houston	TX	US	
Gunaratne, Gemunu H.	East Lansing	MI	US	
Arnold, Mark	Shaanxi		US	
Wang, Haixiang			US	
Wei, Guowei W.			US	
Bao, Zheng			CN	

US-CL-CURRENT: [382/276](#); [382/128](#), [382/254](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 20030026493 A1

L7: Entry 2 of 8

File: PGPB

Feb 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030026493

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030026493 A1

TITLE: Parallel object-oriented, denoising system using wavelet multiresolution analysis

PUBLICATION-DATE: February 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kamath, Chandrika	Dublin	CA	US	
Baldwin, Chuck H.	Dublin	CA	US	
Fodor, Imola K.	Oakland	CA	US	
Tang, Nu A.	Sacramento	CA	US	

US-CL-CURRENT: [382/260](#); [382/275](#), [382/276](#), [382/304](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 3. Document ID: US 20020029135 A1

L7: Entry 3 of 8

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020029135  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020029135 A1

TITLE: Process for increasing the efficiency of a computer in finite element simulations and a computer for performing that process

PUBLICATION-DATE: March 7, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hollig, Klaus	Zavelstein		DE	
Reif, Ulrich	Reichelsheim		DE	
Wipper, Joachim	Leinfelden-Echterdingon		DE	

US-CL-CURRENT: [703/2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 4. Document ID: US 6453073 B2

L7: Entry 4 of 8

File: USPT

Sep 17, 2002

US-PAT-NO: 6453073  
DOCUMENT-IDENTIFIER: US 6453073 B2

TITLE: Method for transferring and displaying compressed images

DATE-ISSUED: September 17, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johnson; Stephen G.	Newport Beach	CA		

US-CL-CURRENT: [382/239](#); [369/124.06](#), [382/240](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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☐ 5. Document ID: US 5892847 A

L7: Entry 5 of 8

File: USPT

Apr 6, 1999

US-PAT-NO: 5892847

DOCUMENT-IDENTIFIER: US 5892847 A

TITLE: Method and apparatus for compressing images

DATE-ISSUED: April 6, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johnson; Stephen G.	Newport Beach	CA		

US-CL-CURRENT: 382/232; 382/233, 382/239, 382/244, 382/248, 382/304

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 6. Document ID: US 5610815 A

L7: Entry 6 of 8

File: USPT

Mar 11, 1997

US-PAT-NO: 5610815

DOCUMENT-IDENTIFIER: US 5610815 A

TITLE: Integrated vehicle positioning and navigation system, apparatus and method

DATE-ISSUED: March 11, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gudat; Adam J.	Edelstein	IL		
Bradbury; Walter J.	Peoria	IL		
Christensen; Dana A.	Peoria	IL		
Clow; Richard G.	Phoenix	AZ		
Devier; Lonnie J.	Pittsburgh	PA		
Kemner; Carl A.	Peoria Heights	IL		
Kleimenhagen; Karl W.	Peoria	IL		
Koehrsen; Craig L.	Peoria	IL		
Kyrtsos; Christos T.	Peoria	IL		
Lay; Norman K.	Peoria	IL		
Peterson; Joel L.	Peoria	IL		
Rao; Prithvi N.	Pittsburgh	PA		
Schmidt; Larry E.	Peoria	IL		
Sennott; James W.	Bloomington	IL		
Shaffer; Gary K.	Butler	PA		
Shi; Wenfan	Pittsburgh	PA		
Shin; Dong H.	Pittsburgh	PA		
Singh; Sanjiv J.	Pittsburgh	PA		
Stafford; Darrell E.	Dunlap	IL		



Weinbeck; Louis J.	Peoria	IL
West; Jay H.	Pittsburgh	PA
Whittaker; William L.	Pittsburgh	PA
Wu; Baoxin	Pittsburgh	PA

US-CL-CURRENT: 701/23; 318/587, 340/988, 342/357.08, 342/357.13, 342/357.14,  
342/455, 342/457, 701/213, 701/217, 701/221 , 701/301, 73/178R

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 7. Document ID: US 5390125 A

L7: Entry 7 of 8

File: USPT

Feb 14, 1995

US-PAT-NO: 5390125

DOCUMENT-IDENTIFIER: US 5390125 A

TITLE: Vehicle position determination system and method

DATE-ISSUED: February 14, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sennott; James W.	Bloomington	IL		
Kyrtsos; Christos T.	Peoria	IL		
Gudat; Adam J.	Edelstein	IL		
Christensen; Dana A.	Peoria	IL		
Friedrich; Douglas W.	Pekin	IL		
Stafford; Darrell E.	Dunlap	IL		

US-CL-CURRENT: 701/214; 342/357.02, 342/457, 701/226

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 8. Document ID: US 5375059 A

L7: Entry 8 of 8

File: USPT

Dec 20, 1994

US-PAT-NO: 5375059

DOCUMENT-IDENTIFIER: US 5375059 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Vehicle position determination system and method

DATE-ISSUED: December 20, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kyrtsos; Christos T.	Peoria	IL		
Gudat; Adam J.	Edelstein	IL		
Christensen; Dana A.	Peoria	IL		
Friedrich; Douglas W.	Pekin	IL		

Stafford; Darrell E.

Dunlap

IL

US-CL-CURRENT: 701/215; 342/357.03, 342/457, 701/226

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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